

Ron, et al.
U.S.S.N. 10/007,184

Amendments to the claims

This listing of claims will replace all prior versions and listings of the claims in the above application.

Listing of Claims:

Claim 1-40. (canceled)

Claim 41. (previously presented) A reverse thermally viscosifying composition comprising:
a block copolymer in an aqueous medium, the block copolymer comprising,
a first polyoxyalkylene block having a hydrophobic region and a hydrophilic region, said polyoxyalkylene block forming micelles in solution in response to a change in temperature, and
at least a second block comprising a bioadhesive polymer or oligomer,
wherein the composition reversibly viscosifies at a temperature in the range of about 22°C to about 40°C.

Claim 42. (previously presented) A pharmaceutical composition, comprising:
a reverse thermally viscosifying composition comprising,
a block copolymer having first and second blocks in an aqueous medium, wherein the first block comprises a polyoxyalkylene having a hydrophobic region and a hydrophilic region; said polyoxyalkylene block forming micelles in solution in response to a change in temperature, and the second block comprises a bioadhesive polymer or oligomer; and
an active agent which imparts a pharmaceutic or cosmetic effect, said composition characterized in that it viscosifies at a temperature in the range of about 22°C to about 40°C.

Claim 43. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the hydrophobic region of the polyoxyalkylene comprises polyoxyethylene and the hydrophilic region of the polyoxyalkylene comprises polyoxypropylene.

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Claim 44. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the bioadhesive polymer or oligomer is a mucoadhesive.

Claim 45. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the bioadhesive polymer or oligomer comprises a poly(vinylcarboxylic acid).

Claim 46. (currently amended) The composition of claim 45 ~~6~~, wherein the poly(vinylcarboxylic acid) is selected from the group consisting of acrylic acid, substituted acrylic acid, methacrylic acid, substituted methacrylic acids, acids, and ionized forms thereof.

Claim 47. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the polyoxyalkylene comprises a triblock polymer of polyoxyethylene (POE) and polyoxypropylene (POP) having the formula $(POP)_a (POE)_b (POP)_a$, where a is in the range of 100-50 and b is in the range of 50-70.

Claim 48. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the aqueous medium is selected from the group consisting of water, salt solutions and water with water-miscible organic compound(s).

Claim 49. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the viscosification occurs at a temperature in the range of about 30°C to about 37°C.

Claim 50. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the block copolymer is present in an amount in the range of about 0.01 to 20 wt% of the total composition.

Claim 51. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the block copolymer is present in an amount in the range of about 0.1 to 10 wt% of the total composition.

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Claim 52. (currently amended) The composition of claim 41 or 42 ~~2 or 3~~, wherein the block copolymer is present in an amount in the range of about 0.01-1 wt% of total composition.

Claim 53. (currently amended) The composition of claim 42 ~~3~~, wherein the pharmaceutically active agent is selected from the group consisting of anti-ulcer agents, sucralfate, H2-blocking agents, antipyretics, analgesics, antacids, antiflatulents, anticonvulsants, antidiarrheals, antifungals, antihypertensives, antihistamines, antipruritics, antiinfectives, antinauseants, antireflux agents, antispasmodics, contraceptives, hormonals, steroids, cough/cold remedies, diuretics, laxatives, tranquilizers, muscle relaxants, mineral supplements, sedatives, vitamins and mixtures thereof.

Claim 54. (currently amended) The composition of claim 42 ~~3~~, wherein the pharmaceutical agent is absorbable through skin or mucosal membranes.

Claim 55. (currently amended) The composition of claim 42 ~~3~~, wherein the pharmaceutical agent is absorbable through vaginal mucosal membrane.

Claim 56. (currently amended) The composition of claim 55 ~~16~~, wherein the pharmaceutically active agent is selected from the group consisting of natural and synthetic hormones, anti-fungals, contraceptives, anti-yeast agents, steroids, moisturizers, spermicides, anti-virals, analgesics and anaesthetics.

Claim 57. (currently amended) The composition of claim 42 ~~3~~, wherein the pharmaceutical agent is absorbable through nasal mucosal membrane.

Claim 58. (currently amended) The composition of claim 57 ~~18~~, wherein the pharmaceutically active agent is selected from the group consisting of decongestants, antihistamines, anti-osteoporosis agents, hormones, antineoplastic agents, Parkinsonism drugs and vaccines.

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Claim 59. (currently amended) The composition of claim 42 3, wherein the pharmaceutical agent is absorbable through rectal mucosal membrane.

Claim 60. (currently amended) The composition of claim 42 3, wherein the pharmaceutical agent is absorbable through otic mucosal membrane.

Claim 61. (currently amended) The composition of claim 60 21, wherein the pharmaceutically active agent is selected from the group consisting of miotics, sympathomimetics, beta-blockers, prostaglandin, muscarinic antagonists, anti-infectives and carbonic anhydrase inhibitors.

Claim 62. (currently amended) The composition of claim 42 3, wherein the pharmaceutical agent is absorbable through ophthalmic mucosal membrane.

Claim 63. (currently amended) The composition of claim 42 3, wherein the pharmaceutical agent is absorbable through esophageal mucosal membrane.

Claim 64. (currently amended) The composition of claim 42 3, wherein the pharmaceutical agent is absorbable through oral cavity membrane.

Claim 65. (currently amended) The composition of claim 42 3, further comprising an additive selected from the group consisting of antioxidants, isotonicizing agents, buffer, flavoring and preservatives.

Claim 66. (currently amended) The composition of claim 42 3, wherein the pharmaceutical composition is applied in the form of drops or spray.

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Claim 67. (currently amended) The composition of claim 42 3, wherein the composition is incorporated into a tablet for oral administration.

Claim 68. (currently amended) The composition of claim 42 3, wherein the composition is injectible.

Claim 69. (currently amended) The composition of claim 41 or 42 2-or-3, wherein the polyoxyalkylene comprises a triblock polymer of polyoxyethylene (POE) and polyoxypropylene (POP) having the formula $(POE)_a(POP)_b(POE)_c$, where a is about 100 and b is about 65.

Claim 70. (canceled)

Claim 71. (canceled)

Claim 72. (canceled)

Claim 73. (canceled)

Claim 74. (canceled)